BITUMINOUS REPAIR

1. SCOPE

The work shall consist of the resurfacing of paved, public roads disturbed or damaged as a direct consequence of achieving the requirements of these Contract Documents. This specification is generally intended to provide for the replacement of pavement disturbed as a part of the work, such as culvert installation or the transporting of construction materials to the job site.

At the ENGINEER'S discretion, the requirements of this specification may also apply to other damages to non-state-maintained roads, such as potholes and rutted areas, when in the opinion of the ENGINEER such damages are unavoidable in the prudent and practical accomplishment of the various items of work required to complete the Project. However, any damages to state-maintained roads and damages to non-state-maintained roads caused by negligence of the CONTRACTOR shall be the sole responsibility of the CONTRACTOR. Such damages shall be repaired to the satisfaction of the ENGINEER and the COMMONWEALTH shall incur no additional expense therefore.

Roads, bridges, and/or crossings on which the COMMONWEALTH will be reimbursing the CONTRACTOR for possible repairs and corrections associated therewith will be, insofar as possible, designated on the Design Drawings, and discussed at the "Pre-bid" showing of Project. Nonetheless, it shall be the CONTRACTOR'S responsibility to solicit clarifications and/or instructions from the ENGINEER on a site-specific basis prior to mobilizing to the individual sites.

2. MATERIALS

- **2.1.** General: All bituminous materials used in the resurfacing operation shall meet the requirements of the Kentucky Transportation Cabinet's "Standard Specifications for Road and Bridge Construction", current edition.
- **2.2. Dense Graded Aggregate**: Shall conform to the "Crushed Aggregate and Channel Lining" technical specification.
- **2.3.** <u>Leveling and Patching</u>: The bituminous mixture used for leveling and patching shall consist of the same bituminous concrete surface mix used in the resurfacing operation.
- **2.4.** Tack and Prime: Any of the following emulsions are permitted for use as a tack material: SS-1, SS-1h, CSS-1, CSS-1h, AE-60, RS-1, or CRS-1. Furnish a primer that conforms to ASTM D41 and ensure the supplier provides certification of conformance. All tack and prime materials shall meet the applicable requirements of the Kentucky Transportation Cabinet's "Standard Specifications for Road and Bridge Construction", current edition. Cut back asphalts may be used only with the written permission of the ENGINEER, and shall be in conformance with all applicable laws and regulations concerning air pollution control.

The temperature limitations for applying prime and tack coats shall be that specified for the type of construction with which such work is included. Prime and tack coats shall not be applied to wet surfaces.

When RS-1 or CRS-1 is furnished for tack they shall be applied undiluted at the rate of 0.4 pound (0.05 gallon) per square yard, unless otherwise specified in the requirements for the bituminous mixture being placed. When SS-1, SS-1h, CSS-1h, or AE-60 is furnished for tack the material may be applied without dilution providing uniform and satisfactory coverage is achieved. Unless otherwise specified in the requirements for the bituminous mixture being placed, the application rate for undiluted SS-1, SS-1h, CSS-1, CSS-1h, or AE-60 shall be 0.4 pound (0.05 gallon) per square yard.

Prime coats shall be applied at the rate specified in the Plans, or as directed by the ENGINEER, when conditions justify variations in the rates of applications.

At the time of application, the temperature of prime and tack materials shall be within the ranges:

PRIME	
Primer L	60-120°F
TACK	
SS-1, SS-1h, CSS-1	
CSS-1h, AE-60	70-160°F
RS-1, CRS-1	70-140°F

On projects over which public traffic is being maintained, the tack coat shall be applied over one-half of the pavement width not to exceed one-half day's work in advance of the construction of the bituminous cover course; provided, that at no time shall the tack coat application end at a location hazardous to traffic. Tack coat application requiring an overnight lane closure will not be allowed. The work shall be arranged so that at the end of runs all tack shall be covered with the bituminous mat.

Provide necessary barricades, warning signs, and flagmen to ensure against traffic traveling over freshly applied prime or tack coat.

2.5. Resurfacing Material: Resurfacing material shall consist of Bituminous Concrete Surface, Class I, (bituminous asphalt) using coarse aggregate meeting the requirements of the Kentucky Transportation Cabinet's "Standard Specifications for Road and Bridge Construction", current edition. Natural conglomerate, crushed slag, crushed granite, crushed siliceous gravel, or crushed sandstone sand will be required in the proportions of no less than 25% of the total combined fine and coarse aggregates in Bituminous Concrete Surface, Class I.

At least 10 days prior to the resurfacing operation, supply the ENGINEER in writing with information concerning the composition of the surface mix intended for use as well as the source from which he intends to obtain the material.